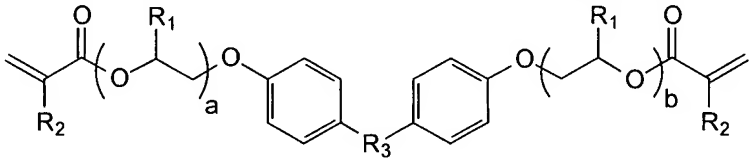
We claim:

What is claimed is:

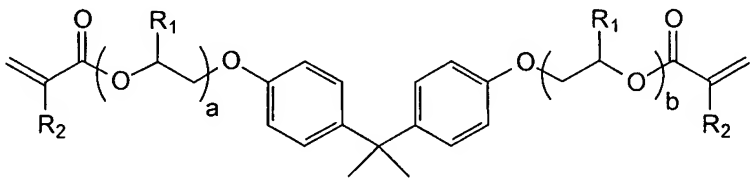
1. A low shrinking polymerizable dental material, comprises a mixture of
   (a) 70 to 85 % w/w of an organic or an inorganic filler and
   (b) 15 to 30 % w/w of a polymerizable resin matrix, and has a volumetric polymerization shrinkage of less than 2 percent by volume; wherein the material comprises a mixture of
   (c) 25 to 40 % w/w of a polymerizable di- or poly(meth)acrylate,
   (d) 45 to 65 % w/w of an alkoxylated bisphenol dimethacrylate,
   (e) 0 to 20 % w/w of a polymerizable monomer,
   (f) 0.1 to 3.0 % w/w of polymerization initiator and/or sensitizer and stabilizer and
   (g) 0 to 10 % w/w of an antimicrobial compound; said alkoxylated bisphenol dimethacrylate is selected from the group consisting of



wherein R_1 and R_2 independently denote H (hydrogen) or a monofunctional substituted or unsubstituted C_1 to C_{18} alkyl, C_5 to C_{18} substituted or unsubstituted cycloalkyl, substituted unsubstituted C_5 to C_{30} arylene or heteroarylene, R_3 is a difunctional substituted or unsubstituted C_1 to C_{18} alkyl, O, S, SO_2 or $C(CF_3)_2$,

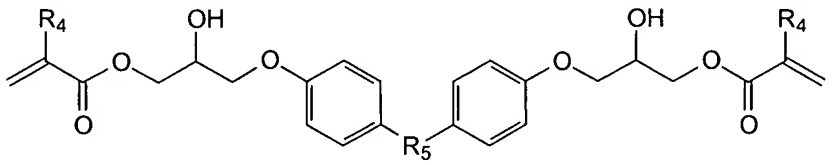
a and b are integers wherein a + b is from about 2 to about 20,

and,

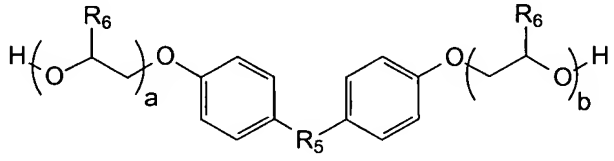


wherein R_1 and R_2 independently denotes H or a monofunctional substituted or unsubstituted C_1 to C_{18} alkyl, C_5 to C_{18} substituted or unsubstituted cycloalkyl, substituted unsubstituted C_5 to C_{30} arylene or heteroarylene, and a and b are integers wherein a + b is between about 2 and about 20;

and wherein said polymerizable di- or poly(meth)acrylate is selected from the group consisting of the reaction product of molecules **A** and **B** with **C**



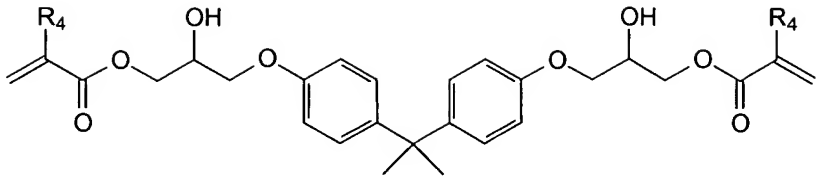
A



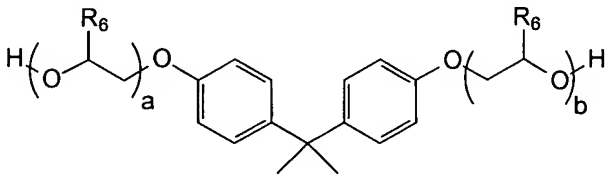
B

$$OCN{-}R_7{-}NCO \quad \mathbf{C}$$

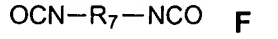
whereby the molar ratio of **A** and **B** varies between 1.0 to 0 and 0.2 to 0.8 and the molar ratio of (**A** + **B**) and **C** varies between 1.0 to 0.05 and 1.0 to 1.1, wherein R_4 denotes H or a monofunctional substituted or unsubstituted C_1 to C_{18} alkyl, C_5 to C_{18} substituted or unsubstituted cycloalkyl, substituted unsubstituted C_5 to C_{30} arylene or heteroarylene; R_5 is a difunctional substituted or unsubstituted C_1 to C_{18} alkyl, O, S, SO_2 or $C(CF_3)_2$, R_6 denotes H or a monofunctional substituted or unsubstituted C_1 to C_{18} alkyl, C_5 to C_{18} substituted or unsubstituted cycloalkyl, substituted unsubstituted C_5 to C_{30} arylene or heteroarylene R_7 is a difunctional substituted or unsubstituted C_2 to C_{30} alkylene, C_5 to C_{30} substituted or unsubstituted cycloalkylene, substituted or unsubstituted C_5 to C_{30} arylene or heteroarylene a and b are integers, and the reaction product of molecules D and E with F



D



E



F

whereby the molar ratio of D and E varies between about 1.0 to 0 and about 0.2 to about 0.8 and the molar ratio of (D + E) and F varies between about 1.0 to about 0.05 and about 1.0 to about 1.1; wherein R_4 denotes H or a monofunctional substituted or unsubstituted C_1 to C_{18} alkyl, C_5 to C_{18} substituted or unsubstituted cycloalkyl, substituted unsubstituted C_5 to C_{30} arylene or heteroarylene R_6 denotes H or a monofunctional substituted or unsubstituted C_1 to C_{18} alkyl, C_5 to C_{18} substituted or unsubstituted cycloalkyl, substituted unsubstituted C_5 to C_{30} arylene or heteroarylene R_7 is a difunctional substituted or unsubstituted C_2 to C_{30} alkylene, C_5 to C_{30} substituted or unsubstituted cycloalkylene, substituted or unsubstituted C_5 to C_{30} arylene or heteroarylene and a and b are integers as above;

and wherein said polymerizable monomer is selected from the group consisting of mono- and polyfunctional acrylate and methacrylateacrylate.